

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
31 July 2003 (31.07.2003)

PCT

(10) International Publication Number  
WO 03/062111 A1

(51) International Patent Classification<sup>7</sup>: B65H 51/14

(21) International Application Number: PCT/GB03/00273

(22) International Filing Date: 24 January 2003 (24.01.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0201793.7 26 January 2002 (26.01.2002) GB

(71) Applicant (for all designated States except US): MINI-FLEX LIMITED [GB/GB]; The Technology Centre, Station Road, Framlingham, Suffolk IP13 9EZ (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): JENKINS, Peter, David [GB/GB]; Cherry Tree Farmhouse, Framlingham, Suffolk IP13 9RH (GB). JENKINS, Daniel, Owen [GB/GB]; Cherry Tree Barn, Framlingham, Suffolk IP13 9RH (GB).

(74) Agents: WILSON, Peter, David et al.; Dummett Copp, 25 The Square, Martlesham Heath, Ipswich, Suffolk IP5 3SL (GB).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

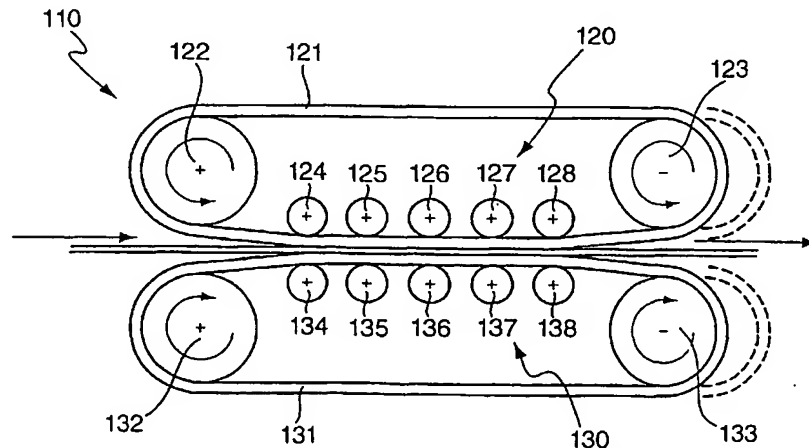
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CATERPILLAR TRACTION APPARATUS



(57) Abstract: A caterpillar traction apparatus (110), wherein two pairs of pulleys (122 & 123, 132 & 133) can be driven at different speeds, so that the linear member (40) being driven by the mechanism is subjected to either compression or extension forces.

WO 03/062111 A1